March now 6th driest, current reservoir storage, and climate recap for February.

With the Governor visiting the Joint Operations Center yesterday, and our Flood Safety Awareness Press Conference last week, there was not enough time to send out a bulletin prior to this cold front. Hope you are all enjoying the now sunny, cool, spring day.

A cold, but moisture-challenged system moved across the state Monday and Tuesday. Instead of the driest March on record, the 8 station index rose 1.2" to 1.6" for March; now the 6th driest!

Here's how this odd water season has unfolded for the 8 station index:

```
Oct
       0.5"
               17% avg. Oct
Nov
       5.7"
              90% avg. Nov
Dec
       8.5"
              101% avg. Dec
       1.4"
              16% avg. Jan (6th driest)
Jan
Feb
       13.6"
              170% avg. Feb
       1.5"
               22% avg. Mar (6th driest)
Mar
```

The water year 2007 October-March seasonal total is 31.3", which is the 23rd driest out of 88 years of record.

3-day rainfall totals as of 8am this morning:

McCloud (west side Upper Sac 2,690')	0.71"
Paradise (Feather Basin 1,750')	1.26"
Blue Canyon (I-80 5,280')	1.55"
Folsom (340' Sac Co.)	0.20"
Ben Lomond (365' South San Fran. Bay)	0.74"
Tamarack (7,600' Central Sierra, SJQ)	0.72"
Yucaipa (2,260' San Bernardino Mtns)	0.32"
Stateline (6,235 Tahoe area)	0.48"

The storm also lead to valley thunderstorms; this paragraph comes from Steve Johnson, Atmospherics:

"The bulk of Fresno's 0.68 inch came from a thunderstorm that struck around 7PM with 0.49 inch in one hour falling, with high winds to 46mph and cloud to ground lightning which left many parts of the metro area without power for several hours. Fresno's thunderstorm sent a powerful dry gust front southward throughout the rest of the SJV during the early evening hrs, that caused havoc with traffic".

Thunderstorms continued along the coastal range, and foothills Tuesday evening, with low snow levels between 2,000' northstate, to 3,500' in the central Sierra.

Snowpack measurements are down, due to both warm-weather snowmelt and little additional snow falling in March. Today's measurement at Alpha (el. 7,600') along Highway 50 (one of the 280 measurements taken on April 1), came to 43% of long term average – 48.4" snow depth, 14.4" water content. The full survey will be tallied next week. Rather than gaining several inches of snowpack as is normal for March, we've seen a drop of several inches. The peak this year came several weeks early, around the first week of March. Statewide snow sensor measurements of water content average 46%, the lowest that average has been since 1990 when it was 40%. In comparison, this April 1, 2007 preliminary measurement is dwarfed by the April 1, 2006 finalized average of 125%.

In spite of the low precipitation and snowpack at this point, the reservoirs are in good shape.

Reservoir storage is really key to understanding current water supply.

The percentages of average for this time of year are reflective of the storage that DWR carried over from a wet year last year. Numeric reservoir data is within this executive summary:

http://cdec.water.ca.gov/cgi-progs/current/EXECSUM

Additional Water Supply and Snowpack data is available on the CDEC page:

http://cdec.water.ca.gov/

A new graphic of % of average reservoir storage compared to % of capacity is being worked on with the DWR graphics department. When it is completed, it should be linked from the home DWR page. We will send the link through this newsletter when available in this new public-friendly format.

The upcoming weather forecast is for a gorgeous weekend, no added precip for the March rainfall, and the next potential system approaching on Easter Sunday morning (only for the North coast), then another brief northern CA system on the 7th and 8th, and finally a perhaps more effective NorCal system between the 8th and 11th of April, with

rain/snow working its way down the Sierra. Normal April precipitation for the Northern Sierra 8 Station Index would be 3.9", and we need it!

Mike Anderson's climate recap for the month of February is now posted on

line:

 $\frac{http://www.climate.water.ca.gov/docs/California_Climate_Summary_022007.p}{df}$

World Meteorological Day was last Friday, March 23rd. This year is declared 'polar year,' with an emphasis on climate change by the World Meteorological Organization. They have a very nice 2007 calendar on-line, and this would link you to their site for more information:

http://www.entico.com/wmo_2007/

Elissa is on the committee for this year's booth at the California State Fair. It is likely DWR will be in the counties building (Building B), for more foot traffic. New this year will be a climate change display, with potential impacts to California. Should be a fun project, and very visual, which will give us both visitor and media interest.

We'd like to thank Steve Nemeth, Snow Surveys, DWR, for his snowpack and runoff consultation, as well as his meteorological background!

The next newsletter will likely coincide with the April–July runoff bulletin (B120), expected by April 9.

(EL)

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